

CLAIMS:

1. A semiconductor integrated device comprising:

a solid-state image sensor having on a semiconductor substrate, a light receiving section which receives light and generates information charges, and a transfer section which transfers information charges stored in said light receiving section; and wherein a voltage is supplied through a pad electrode arranged along one edge of said

semiconductor substrate;

a light-shielding film which is formed on said semiconductor substrate and which shields at least some part of said transfer section from light;

a first wiring formed in the same layer as said light-shielding film, with one end connected to said pad electrode and an other end extended to a side edge of said semiconductor substrate;

a second wiring arranged to go around a side face of said semiconductor substrate, and connected to said first wiring; and

a sealing member which seals said solid-state image sensor.

2. A semiconductor integrated device according to claim 1, wherein said first wiring has at least two layers, and at least one of these at least plurality of layers is formed in the same layer as said light-shielding film.

3. A semiconductor integrated device according to claim 2, wherein in said first wiring at least one layer is formed in the same layer as said pad electrode.

4. A semiconductor integrated device according to claim 1, wherein said first wiring comprises aluminum containing copper.

5. A semiconductor integrated device according to claim 1, wherein said first wiring has a film thickness of no less than 2.0 μ m and no more than 10 μ m.

6. A production method for a semiconductor integrated device in which an end part of a first wiring extends to a side edge of a solid-state image sensor, and in which this first wiring is connected to a second wiring arranged to go around a side face of said solid-state image sensor, said method including:

15 a first process in which a light receiving section which receives light and generates information charges, and a transfer section which transfers information charges stored in said light receiving section, are formed, and then said solid-state image sensor is formed on said semiconductor substrate;

20 a second process in which a light-shielding film which shields at least said transfer section, is formed on said semiconductor substrate, and said first wiring is formed in the same layer as said light-shielding film; and

25 a third process in which said second wiring is formed and connected to said first wiring.

7. A production method for a semiconductor integrated device according to claim 6, wherein in said second process said first wiring is formed from aluminum containing copper.

8. A production method for a semiconductor integrated device in which an end part of an internal wiring extends to

a side edge of a solid-state image sensor, and in which this internal wiring is connected to an external wiring arranged to go around a side face of said solid-state image sensor, said method including:

5 a first process in which a light receiving section which receives light and generates information charges, and a transfer section which transfers information charges stored in said light receiving section, are formed, and then said solid-state image sensor is formed on said
10 semiconductor substrate;

 a second process in which a pad electrode which supplies voltage to said light receiving section and to said transfer section, is formed while a first internal wiring is formed in the same layer as said pad electrode;

15 a third process in which a light-shielding film which shields at least said transfer section, is formed on said semiconductor substrate while a second internal wiring which overlaps said first internal wiring, is formed in the same layer as said light-shielding film; and

20 a fourth process in which an external wiring is formed and then said first internal wiring and said second internal wiring are connected.

9. A production method for a semiconductor integrated
25 device according to claim 8, wherein in said second and third processes, said first and second internal wiring is formed from aluminum containing copper.